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COUNTY OF LINCOLN—PARTS OF KESTIVEN

ANNUAL REPORT

of the

COUNTY MEDICAL OFFICER

OF HEALTH

for the year

. 1947

J. H. C. CLARKE, M.A., M.D., D.P.H., D.T.M. & H.

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COUNTY OF LINCOLN—PARTS OF KESTEVEN

PUBLIC HEALTH AND HOUSING COMMITTEE

(Constitution as at 4th July, 1948)

Chairman :

Alderman T. W. ATKINSON

Vice-Chairman :

Alderman Mrs. G. H. SCHWIND, M.B.E.

Aldermen

C. W. BARRAND
Mrs. L. BASFORD
H. DEER
E. S. DUNKERTON
A. EVERETT
F. J. JENKINSON (*ex-officio*)
Sir R. PATTINSON, D.L. (*ex-officio*)

Councillors

Lt.-Col. J. CRACROFT-AMCOTTS, D.S.C.
R. A. COLLINS
W. GRIFFIN
H. E. HOUGH

Councillors

G. W. HUTSON
Rev. C. LETTS
J. W. MILNER
M. OGDEN
F. L. PRESTON
A. W. SHARMAN
J. E. SNELL
F. C. TOWNSEND
H. R. E. E. WELBY, C.M.G.
A. WILSON
F. WINTER
(*Three Vacancies*)

MATERNITY AND CHILD WELFARE COMMITTEE

(Constitution as at 4th July, 1948)

The Public Health and Housing Committee with the following additional members :—

Mrs. E. F. BULLMORE
Mrs. J. CRACROFT-AMCOTTS
Mrs. A. T. DEAN
Mrs. S. GREENALL
Mrs. PALMER

Mrs. D. RAVELL
The Hon. Mrs. TROLLOPE-BELLEW
Mrs. F. G. WALL
Mrs. CARL WILLOWS
Mrs. C. ST. JOHN WRIGHT

Public Health Officers of the County Council

County Medical Officer of Health :

School Medical Officer :

Tuberculosis Officer :

Medical Officer for Maternity and Child Welfare :

Medical Supervisor of Midwives :

J. H. C. Clarke, M.A., M.D., D.P.H., D.T.M., & H.

Deputy County Medical Officer of Health, Deputy School Medical Officer, Deputy Tuberculosis Officer and Deputy Medical Officer for Maternity and Child Welfare :

T. J. O'Sullivan, M.A., M.D., D.P.H., L.M.

Assistant County Medical Officers, Assistant School Medical Officers, Assistant Tuberculosis Officers and Assistant Medical Officers for Maternity and Child Welfare :

*J. A. Galletly, M.A., M.B., B.Ch., D.P.H.

*W. Anley Hawes, M.B., B.S., D.P.H.

*G. A. F. Holloway, L.M.S.S.A.

R. F. McKeown, M.B., B.A.O., B.Ch., D.P.H. (*appointed*
18 1947)

*V. B. Tulloch, M.B., Ch.B., D.P.H.

Orthopaedic Surgeon :

*G. A. C. Shipman, M.A., M.B., Ch.B., M.R.C.S., L.R.C.P.

Ophthalmic Surgeons :

*W. A. Briggs, M.B., B.Ch., D.O.M.S.

*Allan H. Briggs, M.Sc., M.B., Ch.B., D.O.M.S.

*Seamus P. Redmond, M.B., B.Ch., D.O.M.S.

Medical Officer for Venereal Diseases :

*A. D. Frazer, M.D., D.P.H.

Dental Surgeons :

J. E. Mann, L.D.S., R.C.S. (Eng.)

C. G. Grant, L.D.S., R.C.S. (*appointed* 13 1947)

G. Turner, L.D.S. (*appointed* 17 11 1947)

I. W. Walmsley, L.D.S., R.C.S. (Ed.) (*resigned*, 14 10 1947)

Public Analysts :

*A. H. M. Muter, F.I.C., F.C.S.

*W. W. Taylor, B.Sc., F.I.C.

Superintendent Health Visitor :

Non-Medical Supervisor of Midwives :

*Miss M. Hughes

* Part-time Officers

Consulting Physician for Rheumatism and Heart Diseases :

*J. W. Brown, M.D., F.R.C.P.

County Health Visitors :

Mrs. H. M. Andrews	Miss E. M. Jones
Mrs. J. Bleazard	Mrs. T. Kaye (<i>resigned</i> 21.5.47)
Miss M. Bray (<i>app.</i> 14.1.47)	Miss A. Rooke
Mrs. S. E. Jeffries (<i>appointed</i> 1.11.47)	Miss M. E. Stamford (<i>resigned</i> 11.10.47)
	Mrs. A. Stephenson (<i>appointed</i> 1.8.47)

Also 22 District Nurse-Midwives act as part-time Health Visitors.

Physiotherapists :

Mrs. D. M. Halliday, C.S.P. (<i>app.</i> 1.5.47 -- <i>resigned</i> 16.11.47)
Miss G. E. Jones, C.S.P.

County Almoner :

Mrs. E. R. Livesey, A.I.A.

County Health Inspector :

J. F. Lofthouse, M.B., SAN. I., A.M.I.S.E., M.S.I.A.

Dental Attendants :

Mrs. M. Covell	Miss B. M. Mitton
Miss A. M. Turner (<i>appointed</i> 24.3.47)	

Blind Welfare Visitor :

Miss A. Sandwith

Chief Clerk :

J. G. Cox

District Medical Officers of Health and Sanitary Inspectors

<i>District</i>	<i>Medical Officer of Health (all part-time appointments)</i>	<i>Sanitary Inspector</i>
Borough of Grantham	R. F. McKeown, M.B., B.A.O., B.Ch., D.P.H. (<i>appointed</i> 1.8.47) C. H. D. Robbs, M.B. (<i>died</i> 7/2.47)	S. F. Nott
Borough of Stamford	W. Anley Hawes, M.B., D.P.H.	J. Roll
Urban District of Sleaford	J. W. Scholey, M.B., Ch.B.	W. H. Howard (<i>resigned</i> 31.12.47)
Urban District of Bourne	J. A. Galletly, M.B., D.P.H.	J. Nichol (<i>appointed</i> 1.2.47 -- <i>resigned</i> 30.11.47)
Rural District of North Kesteven	W. Sharrard, M.B.	J. Chadwick
Rural District of East Kesteven	J. W. Scholey, M.B., Ch.B.	A. A. Maxwell
Rural District of South Kesteven	J. A. Galletly, M.B., D.P.H.	W. A. Chivers
Rural District of West Kesteven	R. F. McKeown, M.B., B.A.O., B.Ch., D.P.H. (<i>appointed</i> 1.8.47) C. H. D. Robbs, M.B. (<i>died</i> 7/2.47)	J. Dean

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COUNTY OF LINCOLN PARTS OF KESTEVEN

To the Chairman and Members of the County Council

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I beg to present my Annual Report as County Medical Officer of Health for the year 1947.

Once again I have to report that the vital statistics for the Administrative County are very satisfactory. In particular, *the Infant Mortality Rate of 33.31 per thousand live births was appreciably lower than that for 1946 and thus constitutes a new low record for Kesteven. For the thirteenth year in succession the Birth Rate (21.37 per thousand of the estimated population) showed an increase and is the highest recorded since 1920. The Death Rate from all causes was somewhat lower than that for the previous year, i.e., 11.87 per thousand of the estimated population compared with 11.95 for 1946 and 12.0 for England and Wales. It will be noted in the list of chief causes of death on page 8, that Heart Disease again occupies first place and that there was an increase in the number of deaths registered from this cause during 1947. I have made a detailed analysis of the 391 deaths from Heart Disease, and the results of the investigation will be found on Table IV (inset), and pages 10 to 13.*

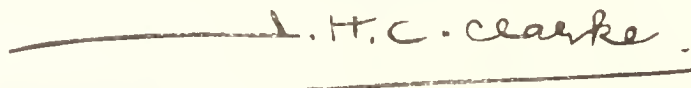
Unfortunately the County did not escape the epidemic of Acute Poliomyelitis during the Summer months, 32 cases being notified to the District Medical Officers of Health and 5 deaths were recorded. Although there were 1,056 cases of Measles reported, it is noteworthy that no deaths resulted. Apart from these two epidemics, no major public health problems arose. The volume of work undertaken by the Staff of the Public Health Department was well maintained, although "field" work was interrupted for several weeks by severe weather in March and April.

The year 1946 saw the enactment of the National Health Service Act, 1946, and a considerable amount of preliminary work in the preparation of schemes under Part III of the Act was undertaken in the Public Health Department during the 12 months concerned. Final results of this work will be reported upon in my Report for 1948, i.e., the year in which the Act came into operation.

I should like once more to express my thanks to the voluntary workers at the Infant Welfare Centres for their valuable assistance, and to record the efficient services rendered by the Staff of the Public Health Department.

I am, Ladies and Gentlemen,

Yours faithfully,



Public Health Department,
County Offices, SLEAFORD.

October, 1948.

STATISTICS AND SOCIAL CONDITIONS

General Statistics

Area of Administrative County (in acres)	163,490
Population (Census 1921)	108,237
Population (Census 1931)	110,360
Population (Registrar-General's estimate, 1917) ..	115,220
Number of inhabited houses (Census 1921)	25,456
Number of inhabited houses (Census 1931)	27,590
Number of families or separate occupiers (1921) ..	25,823
Number of families or separate occupiers (1931) ..	27,815
Rateable Value (1st April, 1948)	£538,708
Estimated product of a penny rate, 1947-48	£2,159

Extracts from Vital Statistics for the Year 1947—

Live Births :

Males : Females : Totals :

Total	4,269	1,193	2,462	Rate per 1,000 of
Legitimate	1,197	1,109	2,306	estimated population :
Illegitimate	72	84	156	21.37 (Rate for Eng- land & Wales : 20.5).

Stillbirths :

Total	31	31	62	Rate per 1,000 of
Legitimate	27	27	54	estimated population :
Illegitimate	4	4	8	0.54 (Rate for Eng- land & Wales : 0.50).

Rate per 1,000 births
— live & still : 24.56.

<i>Deaths :</i>	686	682	1,368	Rate per 1,000 of estimated population : 11.87 (Rate for Eng- land and Wales : 12.0)
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Deaths from Puerperal causes :

*No. of Rate per 1,000 total
deaths : (live & still) births :*

From Puerperal and Post-abort. Sepsis	—	—	(England & Wales 0.16)
From other Maternal causes	3	1.19	(England & Wales 0.85)
Total	3	1.19	(England & Wales 1.01)

Death Rate of Infants under 1 year of age :

	<i>County of</i>	<i>England &</i>
	<i>Kesteven :</i>	<i>Wales :</i>
All infants per 1,000 live births	33.31	11.00
Legitimate infants per 1,000 legitimate live births	32.96	—
Illegitimate infants per 1,000 illegitimate live births	38.46	—

Chief Causes of Death, 1947

<i>Cause of Death</i>	<i>No. of Deaths</i>	<i>Rate per 1,000 of est. pop. Kesteven</i>
Heart Disease	391 (350)	3.39 (3.09)
Cancer	187 (207)	1.62 (1.83)
Intra-cranial vascular lesions	185 (171)	1.61 (1.51)
Bronchitis	72 (66)	0.62 (0.58)
Circulatory Diseases (other than Heart Disease)	53 (61)	0.46 (0.54)
Pneumonia	53 (50)	0.46 (0.44)
Respiratory Tuberculosis	42 (37)	0.36 (0.33)
Violence (Accidental)	38 (40)	0.33 (0.35)
Congenital Malformations, Birth Injuries, Infantile Diseases	32 (37)	0.28 (0.33)
Nephritis	28 (32)	0.25 (0.28)
Digestive Diseases (other than Appendicitis)	25 (33)	0.22 (0.29)
Premature Birth	24 (25)	0.21 (0.22)

(NOTE.—*Figures in brackets relate to 1946*)

Births :

For the thirteenth year in succession the Birth Rate, which was 21.37 per thousand of the estimated population, showed an increase, and was the highest recorded since 1920 ; it also compared very favourably with the figure for England and Wales, viz., 20.5. The number of live births belonging to the Administrative County was 2,462 (1,269 males and 1,193 females)—compared with 2,270, 1,165 and 1,105 in 1946.

The 156 illegitimate live births—representing 6.3 per cent of the total—showed a further welcome decrease : there were 176 (7.8 per cent of the total) such births during the previous year and 267 (12.1 per cent of the total—the highest recorded during the period of hostilities) in 1945. The continued demobilisation of H.M. Forces and the return to more normal home life of a large section of the community was undoubtedly one of the chief reasons for this happier state of affairs.

Both the number of *Stillbirths* (62) and the *Stillbirth Rate* (0.54) were below the average for the previous 10 years.

The following Table, which gives comparative statistics relating to births in the Administrative County since 1935, is of interest :

Year	LIVE BIRTHS				STILLBIRTHS	
	Legitimate	Illegitimate	Total	Rate	No.	Rate
1935	1,454	61	1,515	13.72	74	0.67
1936	1,517	73	1,590	14.09	66	0.59
1937	1,536	72	1,608	14.16	73	0.64
1938	1,569	98	1,667	14.57	70	0.61
1939	1,637	85	1,722	14.84	80	0.69
1940	1,665	88	1,753	15.91	58	0.53
1941	1,749	110	1,859	16.39	62	0.55
1942	1,927	165	2,092	18.47	66	0.58
1943	1,967	162	2,129	18.53	60	0.52
1944	2,045	200	2,245	19.75	64	0.56
1945	1,939	267	2,206	19.97	68	0.62
1946	2,094	176	2,270	20.06	65	0.57
1947	2,306	156	2,462	21.37	62	0.54

The number of births *notified* in the County Welfare Area (i.e., excluding the Borough of Grantham) under Section 203 of the Public Health Act, 1936, was 1,588—1,535 live births and 53 stillbirths.

Details regarding Births in each of the 8 County Districts will be found in Table I, on page 35.

Deaths :

The *Death Rate* from all causes for the County was 11.87 per thousand of the estimated population, compared with 11.95 the previous year and 12.0 for England and Wales. The number of deaths was 1,368 (686 males and 682 females) : the figures for 1946 were 1,352, 693 and 659 respectively. The proportion of deaths over 65 years of age continued to increase viz., 65.8 per cent in the year under review, 64.5 per cent in 1946, 63.9 per cent in 1945, 63.6 per cent in 1944 and 62 per cent in 1943.

There were 82 deaths of infants under one year, representing an *Infant Mortality Rate* of 33.31 per thousand live births : this is the lowest ever recorded in the County. The chief causes of death in this age group were Congenital Malformations, Birth Injuries and Infantile Diseases 29, Premature Birth 24 and Pneumonia 13.

The deaths from maternal causes were 3 in number during 1947, and represent a *Maternal Mortality Rate* of 1.19 per thousand total (live and still) births slightly higher than the figure for the Country as a whole (1.01). There were 2 such deaths in the previous year and 8 in 1945.

The following Table showing the numbers of deaths and rates during the past 15 years may be of interest :

Year	DEATHS (All Causes)		DEATHS (Infants under 1 year)		DEATHS (Puerperal Causes)	
	No.	Rate	No.	Rate	No.	Rate
1947	1,368	11.87	82	33.31	3	1.19
1946	1,352	11.95	90	39.65	2	0.86
1945	1,320	11.95	89	40.34	8	3.52
1944	1,298	11.42	100	44.54	0	0.00
1943	1,408	12.26	90	42.27	6	2.74
1942	1,353	11.94	87	41.59	8	3.71
1941	1,388	12.24	86	45.84	11	5.67
1940	1,511	13.72	85	47.78	5	2.76
1939	1,405	12.23	72	41.71	5	2.77
1938	1,306	11.42	89	53.39	4	2.47
1937	1,384	12.19	103	64.05	3	1.78
1936	1,276	11.31	74	46.54	6	3.62
1935	1,348	12.21	78	51.48	7	4.40
1934	1,228	11.79	78	49.55	5	3.04
1933	1,384	12.59	78	52.00	5	3.18

Further information regarding the causes of death etc., will be found on page 36, and Tables III and IV (inset).

Population :

The civilian population of the County at mid-year 1947 was estimated by the Registrar-General to be 115,220, which was an increase of 2,080 on the estimate for the previous year and 4,740 more than the 1945 figure. The natural increase in population (i.e., the excess of live births over deaths) was 1,094.

HEART DISEASE

The deaths registered under this head during 1947 numbered 391. Reference to the Chief Causes of Death on page 8 shows that Heart Disease remains the Principal Cause of Death. The death rate per 1,000 of the estimated population at 3.39 was 0.3 higher than in 1946. The following is a statement of fatalities from Heart Disease during the 12 years 1936-1947.

Year	No. of Deaths			Crude Death Rate per 1,000 of estimated popu- lation	Percentage to total Deaths from all causes	
1936	..	..	..	306	2.74	23.9
1937	..	..	..	336	2.95	24.3
1938	..	..	..	321	2.84	24.5
1939	..	..	..	384	3.33	27.1
1940	..	..	..	364	3.28	23.8
1941	..	..	..	297	2.62	21.4
1942	..	..	..	302	2.67	22.3
1943	..	..	..	309	2.69	21.9
1944	..	..	..	316	2.78	24.3
1945	..	..	..	362	3.28	27.4
1946	..	..	..	350	3.09	25.8
1947	..	..	..	391	3.39	28.5

Although the number of registered deaths shows a substantial increase in 1947, it is not possible at present to deduce from these figures any significant trend either as regards the number of such fatalities, or their relationship to total deaths from all causes.

In the Statistical Review of the Registrar General for 1935 it was pointed out that an increase of crude mortality from heart disease prior to 1935 was due, among other causes, to the increasing age of the population, and to more frequent record of myocardial degeneration in certification of the deaths of old people. The introduction of the new form of death certificate, it was stated, had led to increased statement of myocardial degeneration or other forms of heart disease as a subsidiary cause of death; and by the operation of the rules of selection of joint causes of death, this often resulted in the transference of the death to the heart group as a consequence. The Registrar General published a table to show the effect on the National Death Rate for 1935 of increasing certification by doctors of "Myocarditis" or "Myocardial" or "Cardiovascular Degeneration" as a cause of death of persons over 65. When allowance was made for these and other disturbing statistical influences, it was shown that the real increase was only 5 per cent for males, and that there was a decrease of 10 per cent for females.

In order to determine the composition of Deaths from Heart Disease in the Administrative County of Kesteven, I have arranged for the Registrar General to split up this figure into its component parts. Deaths from Heart Disease are therefore classified in six main groups, and nineteen sub-groups; also according to age, sex, and by County Districts. These details are given in Table IV (see inset). The County statistics for Heart Diseases show that they are to a large extent characteristic of late middle and old age. Their incidence is noticeable in the age groups commencing at 55 years. There are also three sub-classifications which contain the majority of deaths namely: "Cardiovascular Degeneration," "Other Myocardial Degeneration" and "Diseases of the Coronary Arteries."

A further distinctive group is to be found in Table IV., under Item (C) viz. :—"Chronic Affections of the Valves and Endocardium." Although not large as compared with the other three groups mentioned above, this section may be ascribed in the main to Juvenile, Adult and Senile Rheumatism. It is to be noted that Juvenile Rheumatism is not, as shown by these mortality returns, an important cause of death. Nevertheless, it is estimated that in about 50 per cent of cases of Juvenile Rheumatism, disease of the heart or the valves is eventually established. The resulting impairment of function of the heart with or without intercurrent illness leads to shortened life, and competent authorities have estimated that some 10 per cent of

all deaths from Heart Disease in England and Wales are due in the first instance to Juvenile Rheumatism. The various diseases grouped as Chronic Rheumatism viz., Rheumatoid Arthritis, Osteoarthritis and non-articular Rheumatism, are characterised by pain on movement of one or more joints. They are not important causes of death, but are a chief cause of invalidism as shown by the returns of the National Health Insurance Scheme.

When considering the causes of the three groups of Diseases of the Heart mentioned above, i.e., Cardiovascular and Myocardial Degeneration and Diseases of the Coronary Arteries, the factor of the general ageing of the population will be remembered. This may be one explanation of the rise in the number of deaths from heart disease, as the total population in the later age groups relative to the younger age groups increases. It has to be remembered also, when considering Heart Diseases, that the various organs of the body are interdependent as regards their functions. If the health of one set of organs, e.g., the kidneys is impaired, this may induce disease of the heart, or vice versa. Heart Disease, again, may be responsible for disease of the arteries, and as a result a condition such as cerebral haemorrhage may be induced, which occurrence is so striking that cerebral haemorrhage—not disease of the heart—is given as the cause of death. It will be seen therefore that diseases of the heart and blood vessels are inter-related as regards causation with diseases of other organs.

When estimating the possibility of preventing Heart Diseases it is necessary to discount to a large extent the uninformative label “degeneration” and think back to the more fundamental and original causes of illhealth of the organs of the body. While it is true that the seeds of death are implanted at birth, there is no doubt that much can be done by application of knowledge that is already established, as well as by further research to prevent or at least delay the onset of heart disease. The County Council has already made a start on this problem by the appointment of a Consultant Physician for Rheumatism and Diseases of the Heart in young children. Periodic clinics are held throughout the County by the Physician where children referred from the Maternity and Child Welfare and School Health Services, as well as by doctors in private practice, are examined and supervised as long as may be necessary. Appropriate treatment is also prescribed. Not infrequently children are found with rheumatic inflammation of the heart who presented no symptoms of rheumatism, pains in the joints, chorea, etc. In the majority of these cases of valvular disease, the acute stage was overlooked, or so mild as to remain unnoticed, and the condition passed to one of chronic valvular disease, with increasing tendency to physical impairment of the heart itself. This fact illustrates the importance of discovering these cases in an early stage, by careful watch on children convalescent from sore throats, by routine examination by school medical officers and by special medical

examinations. Early cases of inflammation of the heart respond well to prolonged rest at home or in hospital, and in this way serious damage to the heart in after life can be prevented. Apart from Rheumatism, there is a variety of micro-organisms, e.g., those causing Pneumonia, Scarlet Fever, Typhoid Fever and Diphtheria, which, on gaining access to the blood stream, may injure the heart and blood vessels, either directly or through poisons circulating in the patients' blood. Damage may occur in the kidneys through toxic substances which are excreted. Thus, methods of prevention of diseases of the heart due to such causes must be directed against the infective agents ultimately responsible, and include treatment aimed to secure a limitation of the damage they are likely to inflict upon the body as a whole.

There still remains open, however, a wide field of investigation into specific causes of heart diseases and allied conditions. We still do not know for example why Osteoarthritis becomes increasingly common as old age creeps on, or why some cases of arthritis are benefited by attention to septic teeth or tonsils, while others are not. We do not know why Fibrositis, Lumbago and Sciatica should particularly affect those engaged in hard physical effort who have also been repeatedly exposed to inclement weather, or why residence in a damp house does not invariably bring on Rheumatism.

As far as the known specific infective agents such as bacteria are concerned, the comparatively recent discovery of new therapeutic substances like Sulphonamides and Penicillin give rise to the hope that the incidence of disease caused by these germs can be diminished. There would also appear to be scope on the part of Executive Councils and Regional Hospital Boards to develop the best possible medical and consultant services and treatment facilities to enable patients to derive the greatest benefit from therapeutic knowledge which already exists. In addition there remains need for further research into the manifold causes of heart diseases. As a beginning, it is suggested that the Ministry of National Insurance might disclose to Medical Officers of Health, who are familiar with local conditions and able to conduct investigations in the field, morbidity statistics periodically of Diseases of the Heart and Blood vessels. Investigation of these, and indeed other diseases, from the Social and Environmental points of view might well disclose information of value in their prevention and treatment.

GENERAL PROVISION OF HEALTH SERVICES

Public Health Staff

A list of the Public Health Department's Staff, together with details of the changes which occurred during the year, will be found on page 3.

Laboratory Facilities

These arrangements were as stated in previous Annual Reports, and details of the work carried out will be found under the appropriate sections of this Report.

Ambulance Facilities

There were no alterations in the ambulance facilities in the County during 1947, details of which will be found in my 1943 Annual Report.

Nursing in the Home

The County Council have no scheme providing for general nursing in the home. This work was undertaken by the various District Nursing Associations, all of which were affiliated to the Lincolnshire Nursing Association.

There are normally 43 District Nurse-Midwives employed by the 36 Nursing Associations in Kesteven, of whom 22 act as part-time Infant Health Visitors, Tuberculosis and School Nurses.

CLINICS AND TREATMENT CENTRES

Infant Welfare Centres

Four more Infant Welfare Centres—those at Eagle, Fulbeck, Skellingthorpe and Thurlby—were taken over by the County Council during the year 1947. The number of such Centres provided or subsidised at the end of the year under review was accordingly 21, and full details of attendances etc., will be found in the Table on page 38.

School Clinics

Five School Clinics are provided by the County Council, details of which have been previously published. In accordance with the requirements of the Education Act, 1944, the facilities available were further increased by the appointment of a visiting Ear, Nose and Throat Surgeon and a visiting Dermatologist.

Tuberculosis Dispensaries

Details of the Tuberculosis Dispensaries provided were given in my Annual Report for last year: there were no alterations during 1947.

Treatment Centres for Venereal Diseases

The County Council provides a Special Treatment Centre at 13a Elmer Street South, Grantham, which is open on Thursdays from 9 to 10.30 a.m. for female patients and 11 a.m. to 12 noon, for males. There is also a General Practitioner Treatment Scheme serving Sleaford and district.

Kesteven residents may also receive advice and treatment free of cost at out-county clinics in Lincoln, Boston, Keston, Peterborough and Nottingham.

MATERNITY AND CHILD WELFARE

The County Council is the Local Supervising Authority under the Midwives Acts for the whole of the Administrative County, but the Borough of Grantham is a separate Welfare Area. The following is a summary of the work carried out during the year under the County Maternity and Child Welfare Scheme :—

Infant Welfare Centres

As mentioned earlier in this Report, the County Council took over the Eagle, Fulbeck, Skellingthorpe and Thurlby Infant Welfare Centres during 1947, bringing the total of those provided or subsidised up to 21.

Fourteen thousand, nine hundred and ninety-three attendances were made at these Centres during the year under review—8,735 by infants under one year and 6,258 by children aged 1—5 years : comparable figures for the previous year were 13,925, 8,018 and 5,907 respectively.

The number of individual infants under one year who attended was 1,422 and individual children aged 1—5 years totalled 1,031, making 2,453 in all (1,165, 1,024 and 2,189 in 1946).

Children who attended for the first time were as follows :—infants 1,013, children aged 1—5 years 266, total 1,279.

Consultations with the Medical Staff numbered 5,173, and 14,018 weighings were undertaken.

Ante-Natal and Post-Natal Clinics

The arrangements for the ante-natal and post-natal examination of expectant and nursing mothers by their own medical practitioner continued as before. During 1947, 444 expectant mothers were ante-natally examined under this scheme, and 174 post-natally. The scheme continues to prove of great value, and 120 abnormalities were discovered at these examinations and referred for treatment.

Ophthalmic Treatment

Ninety-eight children under 5 years of age (including 50 new cases) were seen by the Ophthalmic Surgeons during the year. Of the new cases examined, spectacles were prescribed for 23, and new prescriptions were given to 13 old cases : financial assistance in obtaining the glasses was given in one case.

One case of Ophthalmia Neonatorum was provided with in-patient treatment at the Nottingham and Midland Eye Infirmary, Nottingham.

Orthopaedic Treatment

Apart from the dislocation of work caused by the resignation of both whole-time Physiotherapists in October, 1946, the arrangements for the diagnosis and treatment of crippling defects amongst pre-school children continued as before.

One hundred and ninety-one children under 5 years of age (including 105 new cases) saw the Orthopaedic Surgeon (Dr. G. A. C. Shipman) who attended Bourne, Grantham, Sleaford and Stamford as often as required : 212 consultations were held.

With regard to treatment, no fewer than 1,313 attendances (1,691 in 1946) were made for massage, remedial exercises, ultra-violet light, etc. Five children received in-patient treatment in the Grantham and Kesteven General Hospital.

Dental Treatment

Expectant and nursing mothers and children under five years may receive conservative treatment by arrangement, but this part of the Scheme should be further developed when conditions permit.

Health Visiting

The home visiting of pre-school children was carried out by 7 whole-time Health Visitors and 22 District Nurse-Midwives who devote part of their time to these duties. The following is a summary of the work done during 1947, with comparable figures for the previous year shown in brackets.

First visits to expectant mothers	..	..	..	634	(584)
Total visits to expectant mothers	..	..	..	4,165	(4,119)
First visits to children under one year of age	..	..	..	1,756	(1,474)
Total visits to children under one year of age	..	..	..	9,980	(9,420)
Total visits to children between the ages of one and five years	..	..	..	11,650	(13,026)

Child Life Protection

On December 31st, 1947, there were within the County Welfare Area 3 children in the care of a similar number of registered foster mothers. All children "received for reward" were kept under close supervision and regularly visited.

Only one notice was received under the provisions of the Adoption of Children (Regulation) Act, 1939.

Institutional Provision for Mothers or Children

The arrangements made by the County Council for the reservation of beds in the Maternity Wards of the Grantham and Kesteven General Hospital and the Stamford, Rutland and General Infirmary were as before.

A total of 540 Kesteven maternity patients (or 22 per cent of the births) were admitted to hospitals and institutions in the County, as compared with 545 and 23 per cent in 1946. Shortage of midwifery staff again limited the number of admissions concerned.

Hospital or Institution	Kesteven Welfare Area			Borough of Grantham	Grand Total
	Under County Council's M. & C.W. Scheme	Other-wise	Total		
Grantham & Kesteven General Hospital ..	122 (117)	24 (31)	146 (148)	123 (128)	269 (276)
Stamford, Rutland & General Infirmary	15 (44)	87 (101)	132 (145)	— (—)	132 (145)
Grantham Public Assist. Institution	— (—)	40 (49)	40 (49)	96 (75)	136 (124)
Stamford Public Assist. Institution	— (—)	3 (—)	3 (—)	— (—)	3 (—)
Total ..	167 (161)	154 (181)	321 (342)	219 (203)	540 (545)

(NOTE—Figures in brackets relate to 1946)

In addition to the 167 cases mentioned above, 8 unmarried expectant mothers were sent to the Quarry Maternity Home, Lincoln, 7 patients were admitted to the City of Lincoln Maternity Home and single cases entered St. John's Maternity Hospital, Peterborough, The Gables Maternity Home, Peterborough and Newark Town and District Hospital—all under the Council's arrangements—making a grand total of 185 mothers provided with institutional accommodation under the Scheme (178 the previous year).

A total of 14 children were provided with hospital in-patient treatment : 6 cases have been referred to above as having been dealt with under the Orthopaedic and Ophthalmic Schemes, and in addition 3 premature babies, 3 children with enlarged tonsils and or adenoids (for operation), 1 case of cleft palate and a baby with secondary haemorrhage following circumcision were admitted to hospital.

Midwives

A total of 2,479 maternity patients were attended by midwives in the County during 1947 as follows :—

1,441 as Midwives (991 domiciliary and 450 in Institutions)

1,038 as Maternity Nurses (633 domiciliary and 405 in Institutions.)

Great difficulties were experienced in filling vacancies for District Nurse-Midwives and maintaining the Domiciliary Midwifery Service throughout the County. It was not possible to obtain sufficient reliefs, and the Assistant County Nursing Superintendents again had to undertake midwifery duties on the district to avoid a breakdown.

The arrangements for the inspection and supervision of the midwives continued as before, 203 visits for routine inspections and 39 special visits were paid during the year.

The number of cases in which medical aid was summoned during the year under review by a midwife (Section 11 (i) of the Midwives Act, 1918) totalled 419- 412 domiciliary cases and 7 for cases in institutions.

Notifications from midwives were also received as follows :—

Stillbirths	..	..	..	..	..	..	19
Laying-out the dead	..	..	..	..	..	..	4
Liability to be source of infection	..	..	..	..	..	..	8
Artificial Feeding	..	..	..	..	..	..	27
Death of Mother or Child	..	..	..	..	..	..	5

The following additional statistics relating to the work of the 13 midwives employed by the District Nursing Associations in Kesteven may be of interest :—

No. of cases attended, no doctor having been engaged	..	915
No. of these mothers who were primiparae	..	241
No. of Miscarriages	..	38
No. of maternal deaths	..	—
No. of Ante-Natal visits	..	8,637
No. of visits paid to Midwifery patients	..	15,439
No. of Maternity cases attended	..	596
No. of visits paid to Maternity cases	..	9,839

Administration of Analgesics

In spite of staffing difficulties, it was possible to arrange for 5 more midwives to attend courses of instruction in the administration of analgesics in institutions approved by the Central Midwives Board, and at the end of the year 1947 there were 9 midwives practising in the County qualified to administer analgesics—5 domiciliary and 4 in institutions. Additional midwives will be trained as and when circumstances permit.

In accordance with the provision made by the County Council, Minnitt Portable Apparatus for administering gas and air were issued to the Bassingham, Billingham, Bourne and Rauceby midwives making a total of 6 supplied.

A total of 62 analgesics were administered by midwives in domiciliary practice during the year under review.

Home Helps

There was no change in the position with regard to Home Helps, the labour situation and the peculiar difficulties found in a rural County have prevented the establishment of such a Service up to the present.

Premature Infants

Ninety-six babies born in the County were notified as having a birth weight of 5½lbs. or less, and 77 (or 80 per cent) were known to have survived four weeks.

The number born at home was 61, of which 5 were subsequently transferred to hospital or nursing home; the other 35 babies were born in institutions.

Table VII, on page 39, analyses in detail 83 of the cases in respect of which full details have been forthcoming.

The arrangements made by the County Council for the care of premature babies were set out in my Report for 1944.

Illegitimate Children

As will be seen by the statistics given on page 7, the number of illegitimate children born during 1947 was 156 (or 6.3 per cent of the total), which was a considerable decrease on the record high figures for 1945 (267 or 12.1 per cent of the total). The number allocated to the County Welfare Area was 121.

The arrangements made for the care and supervision of illegitimate children and assistance to unmarried expectant mothers, which were set out in my Annual Report for 1945, were further strengthened by the work carried out by the County Almoner. Mrs. Livesey not only assists these cases in a variety of ways, but also serves on the Adoption Committee of the Lincoln Diocesan Association for Moral Welfare.

Arrangements were made for 8 unmarried expectant mothers to enter the Quarry Maternity Home, Lincoln, where they are admitted one month before the anticipated date of confinement and retained for three months afterwards.

MATERNITY AND NURSING HOMES

The arrangements for the registration of nursing homes as required under Sections 187 to 194 of the Public Health Act, 1936, continued as before. On 31st December, 1947, there were 5 registered nursing homes providing accommodation for 46 maternity patients and 18 others; there were 4 homes providing a total of 32 beds at the end of the previous year.

One new home for 2 maternity patients was registered. Exemption from registration under Section 192 (1) of the Public Health Act, 1936 was again granted in 3 cases—2 general hospitals and one cottage hospital.

Sixteen visits of inspection were paid to these Homes during 1947.

MENTAL DEFICIENCY ACTS, 1913-1938

The following particulars of the Mental Defectives in the County on 1st January, 1948, have been supplied by the Public Assistance Officer :—

				Males	Females	Total
(A) Number of Cases "subject to be dealt with" :—						
1.—Under " Order " :—						
(a) (1) In Institutions (excluding cases on Licence)						
Under 16 years of age				20	11	31
Aged 16 years and over				51	75	126
(2) On Licence from Institutions :—						
Under 16 years of age				1	1	2
Aged 16 years and over				9	7	16
(b) Under Guardianship (including cases on Licence) :—						
Under 16 years of age				—	—	—
Aged 16 years and over				1	—	1
2.—In " places of safety " :—						
Under 16 years of age				—	—	—
Aged 16 years and over				—	—	—
3. — Under Statutory Supervision				47	32	79
<i>(Of whom 1 male and 1 female were awaiting removal to an institution)</i>						
4.—Action not yet taken under any one of the above headings						
				30	39	69
(B) Number of Cases who may become " subject to be dealt with "						
				76	63	139
<i>(Of whom 40 males and 41 females were under voluntary supervision)</i>						
Totals				235	228	463

The Lincolnshire Joint Board for the Mentally Defective is responsible for institutional provision for the care of Mental Defectives in Lincolnshire.

PREVALENCE OF, AND CONTROL OVER INFECTIOUS DISEASES

Two thousand and six cases of infectious diseases amongst the civilian population were notified to the District Medical Officers of Health during 1947, compared with 537 in 1946, 1,669 in 1945, 682 in 1944, 2,115 in 1943 and 729 in 1942.

The Notification Rates per 1,000 civilian population were as follows :—

	<i>County of Kesteven</i>	<i>England and Wales</i>
Small pox	0.00	0.00
Typhoid fever	0.18	0.01
Para-typhoid fever		0.01
Scarlet fever	0.87	1.37
Diphtheria	0.23	0.13
Measles	13.07	9.41
Whooping cough	2.10	2.22
Acute Pneumonia	0.52	0.79
Cerebro-spinal fever	0.01	0.05
Erysipelas	0.09	0.19

A Table showing the distribution, etc., of the notified cases will be found on page 40 of this Report.

On 1st April, 1947, the Isolation Hospital and Sanatorium, Bourne, was taken over by the County Council from the South Kesteven Rural District Council; apart from this, there were no alterations in the provision of hospital accommodation for infectious diseases. Owing to the shortage of staff—domestic as well as nursing—it was not possible to re-open the wards for infectious diseases. Similar difficulties were experienced by other hospitals of this type serving the County, and it was thus a major problem to obtain institutional accommodation for cases as they occurred.

Smallpox.—Again no cases of this disease were notified in the County; the last occasion upon which Smallpox occurred in Kesteven was in 1931.

With regard to *Vaccination*, the following figures indicate the apathy and opposition of parents to this particular form of protection:

1. Number of Births registered during the year ended 31st December, 1946	..	..	..	..	2,164	(2,136)
2. Number of these Children:						
(a) Successfully Vaccinated	..	..	..	..	570	(530)
(b) Insusceptible of Vaccination	..	..	..	..		(6)
(c) In respect of whom Statutory Declarations of Conscientious Objection were received	..	..	..	..	1,319	(1,301)
(d) Died Unvaccinated	..	..	..	..	62	(47)
(e) Outstanding (Removals, etc.)	..	..	..	..	213	(302)

on 31st January, 1948

NOTE.—The figures in brackets refer to the previous 12 months

The 570 successful vaccinations represent a percentage of 26.3—a slight improvement on the rate for 1946, viz., 24.2 per cent.

Typhoid and Para-typhoid Fevers.—For the first time in 3 years, 2 cases in the Enteric Group were notified—both from the same area. There were no deaths. Only 3 cases have been recorded during the past 5 years.

Scarlet Fever.—One hundred cases of this disease were recorded, compared with 142 in 1946, and an average of 162 during the years 1941-46. The incidence, which was evenly distributed throughout the year, was less than that for the Country as a whole (see Notification Rates given above).

There were no fatalities.

Diphtheria.—Twenty-seven cases of this dangerous disease occurred during the year—6 more than in 1946; the average number for the quinquennium 1942-46 was 22. No deaths were recorded.

During the year, 1,013 children under the age of five years were *Immunised against Diphtheria* under the arrangements made by the County Council. The total number of such children protected in this way since the inception of the scheme in May, 1946 was accordingly 1,849. Owing to the limited information available, it is not possible at present to make an accurate estimate of the number of children in the County who are immunised against Diphtheria.

Measles.—Of the 1,506 cases notified to the District Medical Officers of Health, no fewer than 702 (or 47 per cent of the total) occurred in the Urban District of Sleaford and the East Kesteven Rural District, where the disease was chiefly prevalent in the last three months of the year. Although the incidence of Measles in the County was considerably higher than in England and Wales as a whole, there were fortunately no deaths. The following is a summary of the cases notified and deaths registered during the past 8 years :—

Year :		Cases :		Deaths :
1947	..	1,056	..	—
1946	..	111	..	—
1945	..	1,093	..	1
1944	..	44	..	—
1943	..	1,599	..	3
1942	..	352	..	—
1941	..	1,625	..	1
1940	..	757	..	2

(It will be noted that Measles is epidemic every second year).

Whooping Cough.—The 242 cases of this disease during 1947 was above the average for the previous 5 years, but the incidence was below that for the Country ; there were 3 deaths—all of babies under one year.

Pneumonia.—Only Acute Primary and Acute Influenzal Pneumonias are notifiable, and 60 cases coming within these categories were notified during 1947, compared with 84 in 1946 and 67 in 1945. Deaths from *all forms* of Pneumonia numbered 53—3 more than last year.

Cerebro-spinal Fever.—Only one non-fatal case was notified. Comparable figures for the previous 5 years were :—1946, 6 cases and 2 deaths ; 1945, 5 cases and 4 deaths ; 1944, 7 with no fatalities ; 1943, 10 and 2 ; 1942, 11 and 4.

Ophthalmia Neonatorum :—One of the two cases notified occurred in the County Welfare Area, and treatment was provided in The Nottingham and Midland Eye Infirmary, Nottingham under the Maternity and Child Welfare Scheme. No impairment of vision resulted from the disease.

Puerperal Pyrexia.—The 20 cases reported during 1947 represent a Notification Rate of 7.92 per thousand total births (live and still) as compared with a National figure of 7.16. The average

number of notifications received during the previous 5 years was 19. There were no deaths from Puerperal Sepsis during the year under review.

Dysentery. Only 1 case was notified compared with the two small outbreaks in 1916 which resulted in 13 patients being reported as suffering from this disease.

Erysipelas. Ten cases (15 in 1916) were notified in the County during the year, representing a Notification Rate of 0.09 (0.19 for England and Wales) per thousand of the civilian population.

Acute Poliomyelitis. Unfortunately Kesteven did not escape the epidemic of this disease which occurred throughout the County—chiefly during the Summer months—and 32 cases were reported with 5 fatalities, compared with 3 cases and no deaths in 1916 and an average of 3 cases annually during the previous 10 years.

TUBERCULOSIS

Details of the new cases of Tuberculosis coming to the notice of the County Health Department during the year under review, and of the deaths from this disease were as follows :

Age Period	New Notifications (including Supplemental Return)				Deaths			
	Pulmonary		Non-Pulm.		Pulmonary		Non-Pulm.	
	M	F	M	F	M	F	M	F
Under 1 year	2	—	—	—	—	—	1	—
1—5 years	—	—	—	—	—	—	2	—
5—15 „	—	—	2	3	—	—	—	—
15—25 „	14	16	4	4	12	12	—	3
25—35 „	11	12	—	4				
35—45 „	7	4	—	1				
45—55 „	5	3	—	—	11	5	1	3
55—65 „	5	1	1	2				
65 and upwards	1	1	—	—				
TOTALS	45	37	7	14	25	17	4	6

Of the above 103 new cases, 39 (31 pulmonary and 8 non-pulmonary) were included in the Supplemental Return to the Ministry of Health, 21 being transfers from other areas, there was 1 posthumous notification, and information concerning the other 17 cases was obtained from the Death Returns.

In comparison, there were 122 new cases in 1916 (78 pulmonary and 44 non-pulmonary), 163 in 1915 (107 and 56), 122 in 1914 (94 and 28), and 114 (92 and 52) in 1913.

The 12 deaths from pulmonary tuberculosis represent a mortality rate of 0.36 per thousand of the civilian population—somewhat higher than the average for the previous 5 years. The 10 deaths from other forms of tuberculosis (bones, joints, glands, etc.) were equivalent to a death rate of 0.09—the same as the 1946 figure. Comparative information relating to the deaths from tuberculosis during the last decennium is as follows :—

		<i>Pulmonary Tuberculosis :</i>		<i>Non-Pulmon. Tuberculosis :</i>	
		<i>No. of Deaths</i>	<i>Death Rate</i>	<i>No. of Deaths</i>	<i>Death Rate</i>
1947	..	42	0.36	10	0.09
1946	..	37	0.33	10	0.09
1945	..	22	0.20	9	0.08
1944	..	36	0.32	7	0.06
1943	..	38	0.33	16	0.14
1942	..	35	0.31	10	0.09
1941	..	36	0.32	12	0.11
1940	..	33	0.30	7	0.06
1939	..	40	0.35	11	0.10
1938	..	33	0.29	8	0.07

The arrangements for the diagnosis and treatment of Tuberculosis remained as before, and the following is a summary of the services rendered :—

(a) *Dispensaries*.—The days and times of opening of the Dispensaries at Grantham, Lincoln and Sleaford, also the facilities at Bourne and Stamford were as set out in previous Reports. A total of 2,399 attendances were made to see the Tuberculosis Officers during 1947, compared with 2,614 in 1946. Details are as follows :—

42 Watergate, Grantham	..	..	..	..	960
Lafford House, Eastgate, Sleaford	..	..	..	..	442
30 Lindum Road, Lincoln	..	..	..	..	713
Bourne and Stamford Clinics (by arrangement only)					284

In addition to the work carried out at the Dispensaries, a large number of patients—both definite cases as well as contacts—have, of necessity, been supervised in their own homes because of the peculiar difficulties encountered in the more sparsely populated areas.

On December 31st, 1947, there were 420 definite cases of Tuberculosis on the Dispensary Registers—277 pulmonary and 143 non-pulmonary—compared with 414 the previous year. Table IX, on page 41 shows in detail the classification of the patients dealt with during the year.

(b) *Artificial Pneumothorax Treatment*.—Nine hundred and eight refills were given to 52 patients, compared with 1,063 treatments the previous year.

The special session for refills continued at the Grantham Dispensary on alternate Friday afternoons; patients receiving this form of treatment are regularly "screened."

(c) Still greater use was made of *X-ray Examinations* for diagnostic purposes as well as for supervising contacts and definite cases. No fewer than 1,026 full-size films were taken during 1947, compared with 802 in 1946 and 634 in 1945.

(d) *Maintenance and Discretionary Allowances, Special Payments.*—Payment of these allowances to certain persons suffering from Respiratory Tuberculosis continued in accordance with the provisions of Ministry of Health Memo. 266 T and Circular 222 46 (which authorised increased allowances for dependent children, with effect from 16th December, 1946). The average number of patients in receipt of this financial assistance was 29 during 1947, an increase on the figure (26) for the previous year. The total amount distributed in Maintenance and Discretionary Allowances and Special Payments was £2,094, or just over £40 per week, during the year ended 31st March, 1948.

One hundred and sixteen patients had benefitted from the Scheme from its inception in October, 1943, to 31st December, 1947.

(e) *Nine Sleeping Shelters* were out on loan during the year; these are getting very old and require frequent repairs.

(f) *Extra Nourishment* in the form of free liquid milk was supplied to 15 patients at an estimated cost of £89 (12 and £82 in 1946).

(g) One thousand, one hundred and sixty-two *Domiciliary Visits* were paid by the County Health Visitors to the homes of patients—an increase of 34 on the 1946 figure.

(h) *Institutional Treatment.*—The number of beds in sanatoria provided by the County Council for the diagnosis and treatment of Pulmonary Tuberculosis was the same, viz., 37—details of which were given in my 1943 Annual Report. The majority of non-pulmonary cases were treated in The Grantham and Kesteven General Hospital under the comprehensive agreement with that hospital.

A total of 127 individual patients received institutional treatment under the County Tuberculosis Scheme during the year (compared with 120 in 1946, 134 in 1945, 132 in 1944, and 134 in 1943)—112 for pulmonary or suspected pulmonary tuberculosis and 15 for other forms, as follows:

	<i>Pulmonary</i>			<i>Non-Pulmonary</i>			<i>Grand Total</i>
	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>	
Creighton Sanatorium	23	28	51	—	—	—	51
Kelling Sanatorium	14	—	14	—	—	—	14
Bourne Isolation Hospital ..	17	19	36	—	—	—	36
Papworth Hall Colony	—	2	2	—	—	—	2
Bransdon Sanatorium	—	4	4	—	—	—	4
Preston Hall Colony	2	—	2	—	—	—	2
The Brompton Hospital	2	—	2	—	—	—	2
Grantham & Kesteven General Hospital	—	1	1	5	5	10	11
County Hospital, Lincoln ..	—	1	1	—	—	—	1
Harlow Wood Orthopaedic Hospital	—	—	—	2	2	4	4
Pinderfields, Leeds	—	1	1	—	—	—	1
Three Counties Hosp., Arlesly ..	—	1	1	—	—	—	1
P.A.L., Stamford	1	—	1	—	—	—	1
Stamford, Rutland & General Infirmary	—	—	—	—	1	1	1
Harefield Hospital, Middlesex ..	—	1	1	—	—	—	1
Gl. Ormond St., Children's Hospital	1	—	1	—	—	—	1
Wellhouse Hospital, Barnet ..	1	—	1	—	—	—	1
County Gen. Hosp., Worksop ..	1	—	1	—	—	—	1
Norfolk & Norwich Hospital ..	1	—	1	—	—	—	1
TOTAL	63	58	121	7	8	15	136

NOTE. Nine Pulmonary cases were either transferred from one institution to another or re-admitted during the year.

It was not necessary to take any action under the Public Health (Prevention of Tuberculosis) Regulations, 1925 (relating to persons suffering from pulmonary tuberculosis employed in the milk trade), or under Section 172 of the Public Health Act, 1936 (relating to the compulsory removal to hospital of persons suffering from tuberculosis).

VENEREAL DISEASES

There were no alterations in or additions to the arrangements for the diagnosis and treatment of Venereal Diseases. The majority of Kesteven patients attended the County Council's Treatment Centre at 13a Elmer Street South, Grantham, as in previous years. The General Practitioner Scheme serving Sleaford and district also continued to do good work.

The following Table shows the number of Kesteven patients who attended the various Treatment Centres for the first time during 1947, together with the attendances made by *all* cases—old and new :—

Treatment Centre	New Cases dealt with				Total New Cases	Total Atten- dances (All Cases)
	Syphilis	Soft Chancre	Gono- rrhoea	Non- Venereal		
Grantham	9 (16)	()	11 (30)	16 (67)	69 (113)	869 (1,198)
Lincoln	12 (18)	()	19 (23)	36 (38)	67 (79)	601 (580)
Peterborough	1 (2)	()	8 (6)	22 (29)	34 (37)	121 (159)
Keston	— (1)	()	3 (3)	7 (12)	10 (19)	200 (215)
Nottingham	2 (1)	(1)	6 (4)	12 (9)	20 (15)	137 (54)
Stamford (G.P. Scheme)	(3)	(6)	16 (5)	31 (17)	47 (31)	356 (282)
Totals	27 (44)	(7)	66 (71)	154 (172)	247 (291)	2,587 (2,788)

NOTE:—Numbers in brackets relate to 1946

Five hundred and four tests (751 in 1946) on specimens from persons residing in Kesteven were carried out under the special arrangements with the Staffordshire County Council Bacteriological Laboratory at Martin Street, Stafford.

Only 1 notices were received during 1947 under Regulation 33B of the Defence (General) Regulations concerning 3 contacts, 1 male and 2 female; the figures for the previous year were 13—11, 0 and 11. During the 5 years the Regulation was in operation (it having been revoked on 31st December, 1947), 75 individuals (5 male and 70 female) have been reported in Kesteven. Eleven of the 70 women were notified on more than one occasion, and "clearance" certificates were received in respect of 4 of these cases; of the remainder, 3 were undergoing treatment at the end of the year (including one case prosecuted during 1947 and committed with the approval of the Home Office to the Rampton State Institution), 3 removed to unknown destinations and a single case could not be identified owing to lack of information.

CANCER

The Scheme for the diagnosis and treatment of Cancer, established under the Cancer Act of 1939 and covering the Geographical County of Lincolnshire, continued to develop and the volume of work on behalf of Kesteven residents was well maintained.

A total of 211 consultations—85 with male patients and 159 with female patients—were held at the three *Out-patient*

Consultative Clinics (County Hospital, Lincoln, Grantham and Kesteven General Hospital and The Stamford, Rutland and General Infirmary) by Dr. J. Z. Walker, Director of Radiotherapy : 39 (22 males and 17 females) were seen for the first time.

Two hundred and six persons—96 males and 110 females (192 the previous year) were provided with *in-patient treatment* during 1947, there being 208 admissions and 227 discharges or deaths, as follows :—

	<i>Admissions (including 37 transfers and re-admissions)</i>	<i>Discharges and Deaths (including 11 transfers)</i>
Grantham & Kesteven General Hospital ..	15	40
County Hospital, Lincoln	101	97
Scunthorpe War Memorial Hospital ..	65	67
Stamford, Rutland & General Infirmary ..	32	32
The General Hospital, Boston	2	2

The number of patients attending at the Scunthorpe War Memorial Hospital for *out-patient treatment* by Radiotherapy was 58 (24 males and 34 females) making 92 attendances (54, 15, 39 and 85 respectively in 1946).

Since the inception of the Scheme in February, 1943, a total of 1,007 persons (448 males and 559 females) have benefited from the services provided, of whom no fewer than 693 (327 males and 366 females) have been treated in hospital.

Deaths from all forms of Cancer during 1947 numbered 187 (92 male and 95 female) and represented a Death Rate of 1.62 per thousand of the civilian population. The following Table relating to deaths from this disease may be of interest :—

Year	Deaths from Cancer of :—				Total Deaths from Cancer	Death Rate per 1,000 population
	buc. cav. & oesoph (M) Uterus (F)	stomach and duodenum	breast	all other sites		
1947	13	29	20	125	187	1.62
1946	19	12	21	125	207	1.83
1945	18	36	18	119	191	1.73
1944	13	11	20	119	193	1.69
1943	23	10	11	131	208	1.81
1942	18	44	11	129	205	1.81
1941	28	26	17	112	183	1.61
1940	32	38	17	120	207	1.88

SCABIES

The general arrangements for the treatment of Scabies continued as in previous years. During the past four years the number Scabies cases notified has shown a progressive decrease : this may be due to the fact that with the end of the war and its up-

heavals, the population as a whole has become more static. During the year, two of the Scabies Treatment Centres (at Bracebridge Heath and Bourne) were closed, and if the decrease in the notifications of cases continues it will be necessary to further curtail this service. The comparative figures of notifications during the last four years are given below :

1944	..	Cases notified	..	1,745
1945	..		..	1,308
1946	..		..	943
1947	..		..	584

The following is a summary of the work carried out during the year under review :

(a)	Number of cases referred	..	..	..	..	..	584
(b)	Classification of notifications :						
	(i)	True Scabies	..	..	..	..	494
	(ii)	Scabies complicated by secondary infections	..	..	..	..	56
	(iii)	Not Scabies	..	..	..	..	38
(c)	Scabies Cases treated under Scheme :—						
	(i)	At Cleansing Centres	..	..	..	..	497
	(ii)	At Home	..	..	..	..	60
(d)	(i)	Average No. of Treatments necessary	..	..	..	..	2.6
	(ii)	Shortest treatment found necessary	..	..	..	..	1 day
	(iii)	Longest treatment found necessary	..	..	..	..	10 days
(e)	Cases not suffering from Scabies treated :						
	(i)	At Centres	..	..	..	..	12
	(ii)	At Home	..	..	..	..	23
(f)	No. of visits to homes by the Cleansing Nurses	..	..	..	..	..	84
(g)	No. of Contacts treated :						
	(i)	At Cleansing Centres	..	..	..	..	41
	(ii)	At Home	..	..	..	..	19
(h)	Total attendances at Cleansing Centres	..	..	..	..	..	1,301

INSPECTION AND SUPERVISION OF FOOD

Milk and Dairies

I have again to thank Mr. G. A. Moore, Divisional Veterinary Inspector, Ministry of Agriculture and Fisheries, for his report upon the work of his Department in connection with Milk and Dairies. Extracts from this report are given below (in italics) under the appropriate headings.

(i) *County Laboratory.* Two hundred and forty-four samples of milk were tested by the Methylene Blue Technique, of which 66 were failures. The Resazurin Test was applied to 101 samples with the following results :—

Category A—18 ; Category B—33 ; Category C—20.

(ii) *Milk (Special Designations) Regulations, 1936-46.* The County Council are at present responsible for the licensing and supervision of all milk producers in the area who produce milk under the special designations, “Tuberculin Tested” and

" Accredited." When the Food and Drugs Act, 1917 comes into operation all the functions relating to the production of milk will be transferred to the Ministry of Agriculture and Fisheries. The date of this change-over has not yet been announced.

The number of Licences in force on the 31st December, 1917, was :—

Tuberculin Tested	..	..	26 (15)
Accredited	..	..	52 (55)
			78 (70)

(NOTE. Numbers in brackets relate to 1916).

This again shows a steady increase over the previous year. Twelve Tuberculin Tested licences were issued and one was surrendered; three new Accredited licences were issued, five were surrendered and one suspended.

Two hundred and twenty-two samples were taken for bacteriological examination during the year, of which 168 passed and 54 (or 26 per cent) failed the prescribed test: this compared with 18 per cent failures in 1916. Two hundred and sixty visits to farms were made.

" During the year 1917, 68 Accredited herds were inspected, involving a total of 1,474 cows. In addition, 723 Non-designated herds were examined, containing 6,948 cows. No evidence of Tuberculosis was found and there was very little mastitis or other conditions likely to affect the milk.

An increase of 11 herds licensed for the production of Tuberculin Tested milk occurred during 1917 as compared with 1916. There is now a total of 23 Tuberculin Tested herds. The usual statutory Tuberculin Tests of these herds were carried out. A total of 1,221 animals were tested and 31 reactors were found."

(iii) *Milk in Schools Scheme*.—At the end of the year, 169 Schools were participating in the Scheme: this is an increase of 11 schools in 12 months and there are now only 7 schools in the County not receiving regular supplies of liquid milk.

The number and types of individual producer-retailers approved together with the schools supplied were as follows :—

- 5 (5) Retailers licensed to sell Pasteurised Milk were supplying 127 (128) schools.
- 6 (5) " Tuberculin Tested " producers were supplying 13 (8) schools.
- 6 (7) " Accredited " producers were supplying 9 (9) schools.
- 19 (22) Producers were supplying ordinary raw milk to 21 (24) schools.

NOTE. — Figures in brackets relate to 1916.

Eleven new suppliers were approved and four ceased to supply. Ninety-two samples were taken for bacteriological examination, of which 77 were found to be satisfactory.

Eighty-seven visits to farms in connection with the Scheme were made.

(i.) *Tuberculosis in Milk.* The schemes outlined in my previous reports continued. These comprise the sampling of designated producers, school milk producers, supplies to cases of non-pulmonary tuberculosis, supplies to school camps and six-monthly samples of all raw milk retailed in the more thickly populated areas in the County.

A total of 105 samples of milk were taken for biological examination involving 166 herds, 66 of which were "Accredited" or school milk producers with the following results :—

(a) Samples positive to Tubercle Bacilli	..	1
(b) Samples negative to Tubercle Bacilli	..	96
(c) Samples with inconclusive results	..	8

"Accredited" and school milk herds accounted for 44 of the 97 completed examinations.

Tuberculosis Order, 1938

One hundred and thirty-one notifications of cows and calves slaughtered in Government Slaughter Houses and found to be affected with Tuberculosis were received and followed up.

Anthrax Order, 1938

"There was one confirmed case of Anthrax, as a result of which 6 animals died."

Defence Regulation 55G (Restriction on the sale of raw milk)

Sampling of heat treated milk under the above Regulation continued throughout the year. Only one pasteurising plant in the County is at present authorised by the Ministry of Food. Nineteen samples were submitted for examination and the results were as follows :

				Pass		Fail
Methylene Blue	..	..	..	18	..	0
Phosphatase Test	..	..	..	18	..	1

These results are highly satisfactory.

Milk and Dairies General

The number of licences issued under the Milk (Special Designations) Regulations 1936-46 continues to show a steady increase. Comparative figures for the last four years are given below and these show the remarkable increase in the number of 'Tuberculin Tested milk producers' licences issued :

				<i>Tuberculin</i>	
				<i>Tested</i>	<i>Accredited</i>
1914	No. of Licences in force	..	..	8	57
1915	"	"	"	7	61
1916	"	"	"	15	55
1917	"	"	"	26	52

Further substantial improvement of the dairy farms in the County has taken place and many requests by producers for guidance and advice in respect of new schemes and improved conditions have been received during the year.

Food and Drugs Act, 1938

The County Police have for a number of years undertaken the work in connection with sampling under the Act. Owing to their increasing duties, however, the Chief Constable has asked the County Council to relieve him of this work, and it has now been transferred to the Weights and Measures Department.

The number of samples submitted to the Public Analyst during 1917 was 237 (409 in 1916), the details being as follows : -

Baking Powder	4	Malt Cup	1
Beer	2	Malt Wheat	1
Bicarbonate of Soda .. .	1	Marmalade	1
Bread	1	Margarine	6
Butter	1	Meat Paste	4
Cake Flour	1	Meat Sausages	4
Cheese	5	Milk	143
Cocoa	3	Milk, dried	2
Coffee	5	Milk, sweetened	1
Confectionery	3	Mock Marzipan	1
Cooking Fat	3	Mustard	1
Cordial	3	Salad Cream	1
Custard Powder	2	Sausage Meat	1
Fish Paste	1	Semolina	1
Flour (plain)	4	Sponge Mixture	1
Flour (Self-Raising) .. .	2	Sugar	3
Jam	5	Tea	1
Lard	2	Vinegar	3
Lemon Cheese	1	White Pepper	1
Drugs	6		

Twenty-one samples of milk and one sample of Ginger Cordial were found to be adulterated. The Table on page 12 sets out the action taken in these unsatisfactory samples.

SANITARY CIRCUMSTANCES

Housing.

The survey of working class houses directed to be carried out by the Rural Housing Joint Consultative Committee, formed of representatives of the four Rural District Councils and of the County Council has continued. Due to the continuing shortage of qualified Sanitary Inspectors and the pressure of more urgent

duties progress has been rather slow. The following table gives details of the progress made to the end of the year.

Classification of Houses surveyed

1	Satisfactory in all respects	1,032
2	Minor defects	331
3	Requiring repair, structural alteration or improvements ..	2,742
4	Appropriate for re-conditioning under the Housing (Rural Workers) Acts	852
5	Unfit for habitation and beyond repair at a reasonable expense	161
6	Not yet classified	57
	TOTAL	5,878

Rivers Pollution

The third and last complete survey of the River Witham was completed early in 1947 ; a full report of the findings in connection with this work is in course of preparation and will be available during 1948. The general inference to be drawn from the results of samples submitted for examination is that the main body of the river is clean and amply oxygenated. There are still a number of known sources of serious pollution which cannot at the present time be remedied ; the chief of these are the discharge of crude sewage into the main body of the river or into streams which eventually join the river from some of our larger villages. These conditions will continue to be a source of nuisance and pollution until the schemes for sewerage and sewage disposal are put into operation. The amount of pollution being caused from these villages is, I am sure, not fully appreciated. In one case when a sample of the effluent was submitted for examination the Public Analyst reported that it was the worst sample he had ever examined. Forty-seven samples of sewage effluents and river waters were submitted to the Public Analyst during the year, and it is considered that the improvement noted in my previous report with regard to the standard of maintenance of sewage disposal works has been maintained.

Water Supplies

Schemes of water supplies, sewerage and sewage disposal are submitted to the County Council under the Rural Water Supplies and Sewerage Act, 1944, by the District Councils. Such schemes are examined by Messrs. Howard, Humphries and Sons, Consulting Engineers, who advise the Council as to the suitability of the scheme and whether it conforms with the general principles approved by the County Council and will form part of a co-ordinated scheme for the County. During the year the under-mentioned schemes were received by the County Council for their approval :

East Kesteven R.D.C.

Water Supply Scheme (Regional) including the Wilsford and District Scheme.

West Kesteven R.D.C.

Interim Schemes which form part of the Regional Scheme.

(1) Hamlet of Brandon.

(2) Parish of Harlaxton.

In addition, West Kesteven R.D.C. received Ministry of Health approval to, and accepted tender for, carrying out the Interim Scheme for the Lenton Area, Great Gonerby, North and South Witham which was submitted to the County Council in 1946.

The following Public Inquiries were held :

North Kesteven R.D.C.

Sewerage and Sewage Disposal Scheme for North Hykeham.

Bourne U.D.C.

Sewerage and Sewage Disposal Scheme.

South Kesteven R.D.C.

Sewerage Scheme.

Schools

The routine inspection of schools has continued to be carried out by the Assistant School Medical Officers and the County Health Inspector. During the year a total of eighty defects at fifty-nine schools were notified to the Director of Education for attention. The structural condition of many of the small schools in the County continues to be unsatisfactory. Owing to lack of funds and the difficulty of obtaining materials and labour defects reported to the School Managers are in many cases not remedied, and conditions continue to become more serious. There seems little hope of a solution to this problem for some time to come.

General

Twenty-five Sanitary complaints were received and dealt with during the year.

Nine samples of drinking water were submitted for bacteriological examination.

Table I. VITAL STATISTICS, 1947

DISTRICT	Population Mid-year 1947 (R.-G. Est.)	No. of Live Births			Birth Rate	No. of Stillbirths			Deaths under 1 year of age			Inf. Mort. Rate	No. of Deaths			Death Rate
		M	F	Total		M	F	Total	M	F	Total		M	F	Total	
Bourne ..	4,575	53	54	107	23.39	3	1	4	1	2	3	28.04	26	27	53	11.58
Grantham ..	23,200	253	257	510	21.98	4	4	8	8	8	16	31.37	153	129	282	12.16
Sleaford ..	7,455	70	58	128	17.17	3	2	5	3	1	4	31.25	36	50	86	11.54
Stamford ..	10,480	106	104	210	20.04	2	2	4	3	3	6	28.57	53	63	116	11.07
Total Urb. Districts	15,710	482	473	955	20.89	12	9	21	15	14	29	30.37	268	269	537	11.75
East Kesteven ..	16,400	204	183	387	23.60	4	8	12	7	10	17	43.93	96	90	186	11.34
North Kesteven ..	22,780	257	216	473	20.76	8	11	19	6	7	13	27.47	152	127	279	12.25
South Kesteven ..	14,480	155	139	294	20.30	3	2	5	3	3	8	27.21	67	91	158	10.91
West Kesteven ..	15,850	171	182	353	22.27	4	1	5	7	8	15	42.19	103	105	208	13.12
Total Rur. Districts	69,510	787	720	1507	21.68	19	22	41	23	30	53	35.17	418	413	831	11.96
Total Adminis- trative County ..	115,220	1269	1193	2462	21.37	31	31	62	38	44	82	33.31	686	682	1368	11.87

Table II.—SHOWING FOR EACH COUNTY DISTRICT THE NUMBER
AND CAUSES OF DEATH DURING 1947

CAUSES OF DEATH	Bourne U.D.	Grantham Borough	Sheaford U.D.	Stanford Borough	Aggregate	E. Kesteven R.D.	N. Kesteven R.D.	S. Kesteven R.D.	W. Kesteven R.D.	Aggregate	TOTALS
1. Typhoid and parat. fevers	—	—	—	—	—	—	—	—	—	—	—
2. Cerebro-spinal fever ..	—	—	—	—	—	—	—	—	—	—	—
3. Scarlet fever	—	—	—	—	—	—	—	—	—	—	—
4. Whooping Cough	—	1	—	—	1	—	1	—	1	2	3
5. Diphtheria	—	—	—	—	—	—	—	—	—	—	—
6. Tuberculosis of resp. system	2	16	2	3	23	6	6	5	2	19	42
7. Other forms of tuberculosis	1	1	—	1	3	1	3	—	3	7	10
8. Syphilitic diseases	—	—	—	1	1	1	—	1	—	2	3
9. Influenza	—	—	—	—	—	2	2	—	2	6	6
10. Measles	—	—	—	—	—	—	—	—	—	—	—
11. Ae. polio-myelitis and polio-encephalitis	—	1	—	1	2	3	—	—	—	3	5
12. Ae. inf. enceph.	—	—	—	—	—	—	—	—	—	—	—
13. Cancer of buc. cav. and oesoph. (M) Uterus (F) ..	—	3	—	1	4	3	3	1	2	9	13
14. Cancer of stomach and duodenum	1	10	1	5	17	3	4	4	1	12	29
15. Cancer of breast	—	3	—	3	6	2	5	1	6	14	20
16. Cancer of all other sites ..	5	26	9	11	51	26	21	14	13	74	125
17. Diabetes	1	1	—	1	3	2	4	2	2	10	13
18. Intra-cran. vascular lesions	11	37	8	15	71	17	41	14	42	114	185
19. Heart disease	13	77	28	31	149	13	84	54	61	242	391
20. Other disease of circ. system	1	17	5	7	30	8	8	3	4	23	53
21. Bronchitis	2	16	3	5	26	6	15	16	9	46	72
22. Pneumonia	1	10	9	1	21	7	11	4	10	32	53
23. Other respiratory diseases	1	5	1	1	8	1	3	—	1	5	13
24. Ulcer of stomach or duo- denum	1	2	—	—	3	3	2	1	2	8	11
25. Diarrhoea under 2 years of age	—	—	—	1	1	2	—	—	1	3	4
26. Appendicitis	—	—	—	—	—	1	—	3	—	4	4
27. Other digestive diseases ..	1	5	2	1	9	7	3	3	3	16	25
28. Nephritis	3	2	3	2	10	6	5	5	2	18	28
29. Puer. and post abort. sepsis	—	—	—	—	—	—	—	—	—	—	—
30. Other maternal causes ..	—	1	—	—	1	1	1	—	—	2	3
31. Premature birth	—	4	2	3	9	3	5	3	4	15	24
32. Con. mal; birth injuries; infantile diseases	2	6	2	2	12	6	7	2	5	20	32
33. Suicide	—	3	1	2	6	1	1	1	2	5	11
34. Road traffic accidents ..	2	4	1	1	8	1	4	—	2	7	15
35. Other violent causes ..	1	4	3	3	11	7	3	2	—	12	23
36. All other causes	4	27	6	14	51	17	37	19	28	101	152
ALL CAUSES	53	282	86	116	537	186	279	158	208	831	1368

Table III.—CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE DURING 1947

CAUSES OF DEATH	Sex	AGGREGATE OF URBAN DISTRICTS					AGGREGATE OF RURAL DISTRICTS						
		All Ages	0—	1—	5—15—	45—65—	All Ages	0—	1—	5—15—	45—65—		
ALL CAUSES ..	M .. F ..	268 269	15 14	3 3	2 —	16 26	63 59 167	418 413	23 30	3 2	2 3	25 29	88 62 277
1. Typhoid and parat. fevers ..	M .. F ..	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
2. Cerebro-spinal fever ..	M .. F ..	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
3. Scarlet fever ..	M .. F ..	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
4. Whooping cough ..	M .. F ..	1 —	1 —	— —	— —	— —	— —	2 —	2 —	— —	— —	— —	— —
5. Diphtheria ..	M .. F ..	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
6. Tuberculosis of resp. system ..	M .. F ..	12 11	— —	— —	— —	5 9	3 2	13 6	— —	— —	— —	7 3	6 3
7. Other forms of Tuberculosis ..	M .. F ..	1 2	1 —	— —	— —	2 —	— —	3 4	1 —	— —	— —	3 —	1 —
8. Syphilitic diseases ..	M .. F ..	1 —	— —	— —	— —	— —	— —	2 —	— —	— —	— —	— —	— —
9. Influenza ..	M .. F ..	— —	— —	— —	— —	— —	— —	4 —	— —	— —	— —	1 —	1 —
10. Measles ..	M .. F ..	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
11. Ac. polio-myelitis and polio-encephalitis ..	M .. F ..	1 1	— —	— —	— —	— —	— —	1 2	1 —	— —	— —	— —	— —
12. Ac. inf. encephalitis ..	M .. F ..	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
13. Cancer of buc. cav. & oesoph. (M) Uterus (F) ..	M .. F ..	2 2	— —	— —	— —	— —	— —	4 5	— —	— —	— —	— —	— —
14. Cancer of stomach and duodenum ..	M .. F ..	10 7	— —	— —	— —	1 —	— —	5 7	— —	— —	— —	— —	— —
15. Cancer of breast ..	M .. F ..	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
16. Cancer of all other sites ..	M .. F ..	31 20	— —	— —	— —	3 1	18 8	14 34	— —	— —	— —	— —	— —
17. Diabetes ..	M .. F ..	1 2	— —	— —	— —	— —	— —	6 —	— —	— —	— —	— —	— —
18. Intra-cran. vascular lesions ..	M .. F ..	31 40	— —	— —	— —	— —	— —	50 64	— —	— —	— —	— —	— —
19. Heart disease ..	M .. F ..	74 75	— —	— —	— —	— —	— —	117 125	— —	— —	— —	— —	— —
20. Other diseases of circ. system ..	M .. F ..	16 14	— —	— —	— —	— —	— —	10 13	— —	— —	— —	— —	— —
21. Bronchitis ..	M .. F ..	13 13	— —	— —	— —	— —	— —	23 23	— —	— —	— —	— —	— —
22. Pneumonia ..	M .. F ..	11 10	4 2	— —	— —	— —	— —	17 15	2 5	— —	— —	— —	— —
23. Other respiratory diseases ..	M .. F ..	5 3	— —	— —	— —	— —	— —	3 2	— —	— —	— —	— —	— —
24. Ulcer of stomach or duodenum ..	M .. F ..	2 1	— —	— —	— —	— —	— —	7 1	— —	— —	— —	— —	— —
25. Diarrhoea under 2 years of age ..	M .. F ..	1 1	— —	— —	— —	— —	— —	2 2	— —	— —	— —	— —	— —
26. Appendicitis ..	M .. F ..	— —	— —	— —	— —	— —	— —	2 2	— —	— —	— —	— —	— —
27. Other digestive diseases ..	M .. F ..	5 4	— —	— —	— —	— —	— —	6 10	— —	— —	— —	— —	— —
28. Nephritis ..	M .. F ..	6 4	— —	— —	— —	— —	— —	3 3	— —	— —	— —	— —	— —
29. Puer. and post abort. sepsis ..	M .. F ..	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
30. Other Maternal causes ..	M .. F ..	6 3	— —	— —	— —	— —	— —	8 9	— —	— —	— —	— —	— —
31. Premature birth ..	M .. F ..	3 2	— —	— —	— —	— —	— —	11 10	— —	— —	— —	— —	— —
32. Cong. mal : birth injuries : infantile diseases ..	M .. F ..	9 2	— —	— —	— —	— —	— —	3 2	— —	— —	— —	— —	— —
33. Suicide ..	M .. F ..	4 5	— —	— —	— —	— —	— —	7 —	— —	— —	— —	— —	— —
34. Road traffic accidents ..	M .. F ..	3 3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
35. Other violent causes ..	M .. F ..	5 6	— —	— —	— —	— —	— —	8 4	— —	— —	— —	— —	— —
36. All other causes ..	M .. F ..	23 28	— —	— —	— —	— —	— —	16 17	— —	— —	— —	— —	— —

TABLE IV.—DEATHS FROM HEART DISEASES DURING 1947

	ADMINISTRATIVE COUNTY (Age Groups and Sex)														COUNTY DISTRICTS (Sex Only)																									
	Under 1		1—4		5—14		15—24		25—34		35—44		45—54		55—64		65—74		75—84		85 and over		TOTALS		Bourne U.D.		Grantham M.B.		Sleaford U.D.		Stamford M.B.		East Kesteven R.D.		North Kesteven R.D.		South Kesteven R.D.		West Kesteven R.D.	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
(A) PERICARDITIS—																																								
(i) Chronic pericarditis specified as rheumatic																																								
(ii) Other pericarditis																																								
(B) ACUTE ENDOCARDITIS—																																								
(i) Acute or subacute bacterial endocarditis																																								
(ii) Other acute and subacute endocarditis																																								
(C) CHRONIC AFFECTIONS OF THE VALVES AND ENDOCARDIUM—																																								
(i) Aortic valvular disease (without mitral disease)															1		2		1				1	3			1				1			2						
(ii) Mitral valve disease							1	1		1		1	2	2	2	1	2	6	3	1			10	13		2	2	3					2	3	4	2		3	2	
(iii) Other specified valvular diseases															1								1									1								
(iv) Unspecified valvular lesions or endocarditis												1		2		5	2	4	2		1	12	5		1		1				3	1	4	3			3	1		
(D) DISEASES OF THE MYOCARDIUM—																																								
(i) Acute myocarditis																																								
(ii) Chronic myocarditis specified as rheumatic																																								
(iii) Cardiovascular degeneration												1	2	2	4	15	7	20	21	3	12	41	46		7	11	3	6	4	4	8	2	5	5	6	11	8	7		
(iv) Myocardial degeneration described as fatty												1			1		1					1	2									1	1			1				
(v) Other myocardial degeneration											1				1	2	16	13	30	37	7	21	55	73	5	2	11	12	2	6	3	4	3	5	14	20	8	12	9	12
(vi) Myocarditis not distinguished as acute or chronic							2								1	1	1	3	3	2	1	1	8	7		1	2			1	1		1	3	1	1	1	1	2	
(E) DISEASES OF THE CORONARY ARTERIES—																																								
ANGINA PECTORIS—																																								
(i) Diseases of the coronary arteries													5		19	6	13	14	15	12	4		56	32	2	1	12	11	4	5	8	4	5	2	13	2	4	5	8	2
(ii) Angina pectoris without mention of coronary disease												1		1		4	3	1				7	3			2				1	1		2		1	1		1		
(F) OTHER DISEASES OF THE HEART—																																								
(i) Functional heart disease (without mention of organic lesion)																		1	1		1		1	2			1					1					1			
(ii) Heart disease specified as rheumatic but otherwise ill defined																																								
(iii) Other diseases											1				1		1	3	3	2	1	6	6			1		1			4	3		1		1		1		
TOTALS							1	1		1	3	2	11	4	31	15	57	53	79	80	17	36	199	192	7	6	39	38	11	17	17	14	25	18	46	38	22	32	32	29

Table V. BIRTH RATES, CIVILIAN DEATH RATE AND ANALYSIS OF MORTALITY DURING 1947

	Rate per 1,000 Civilian Popul'n		Death Rates per 1,000 Civilian Population								Rates per 1,000 Live Births	
	Live Births	Still-Births	All Causes	Typhoid & Paratyphoid Fever	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Small-pox	Measles	Deaths under 1 year of Age	Deaths from Diarrhoea and Enteritis under 2 years
England and Wales	20.5	0.50	12.00	0.00	0.00	0.02	0.01	0.09	0.00	0.01	41	5.8
126 County Boroughs and Great Towns (including London)	23.3	0.62	13.00	0.00	0.00	0.03	0.01	0.09	0.00	0.02	47	8.0
148 Smaller Towns (Resident Popul'n 25,000 - 50,000 at 1931 Census)	22.2	0.54	11.9	0.00	0.00	0.02	0.01	0.08	0.00	0.02	36	3.7
London Administrative County	22.7	0.49	12.8	0.00	0.00	0.02	0.01	0.08	—	0.01	37	4.8
County of Kesteven	21.37	0.54	11.87	0.00	0.00	0.03	0.00	0.05	—	0.00	33.31	1.6

Table VI.—OFFICIAL INFANT WELFARE CENTRES, 1947.

Address of Centre	Days of Opening	Individual Children who attended			Attendances			Consultations with Medical Officer		
		Infants aged		Total	Children aged		Total Aver.	Infants aged		Total
		0—1	1—5		0—1	1—5		0—1	1—5	
BASSINGHAM Conrads Hall ..	First Thursday in the month ..	52	25	57	101	106	207 (21)	76	72	148
BELLINGBOND GILL— Forsters' Hall ..	Third Tuesday in the month ..	63	52	115	235	325	560 (47)	179	191	370
BILBINGHAM ..	Second & Fourth Wednesday in the month ..	38	44	82	186	179	365 (17)	108	98	206
BOURNE— The Clinic, North Road ..	First and Third Thursday in the month ..	145	73	218	688	437	1125 (47)	191	83	274
BRACEBRIDGE— HEATH—Village Hall ..	Fourth Thursday in the month ..	36	56	92	179	275	454 (38)	91	83	174
CASTLE BYTHAM— Village Hall ..	Second Wednesday in the month ..	14	21	35	60	88	148 (21)	10	28	38
CLAYPOLE— Village Hall ..	Second Tuesday in the month ..	39	24	63	184	94	278 (25)	77	38	115
CORBY ..	Fourth Friday in the month ..	34	38	72	102	152	254 (21)	45	49	94
COLSTERWORTPI— Church Room ..	Fourth Monday in the month ..	40	44	84	162	210	372 (31)	49	23	72
†EAGLE— Methodist School Room ..	Second Wednesday in the month ..	22	26	48	78	113	191 (16)	..	..	..
†FULBECK ..	Last Wednesday in the month ..	45	28	73	135	135	270 (22)	48	36	84
HECKINGTON ..	Third Thursday in the month ..	64	27	91	279	142	421 (35)	207	89	296
MARKET DEEPING— Village Hall ..	Second and Fourth Monday in the month ..	72	47	119	454	375	829 (36)	105	54	159
Weslevan School, Church Street ..	First and Third Wednesday in the month ..	82	45	127	518	524	1042 (47)	327	275	602
METHERINGHAM— Village Hall ..	Second and Fourth Tuesday in the month ..	95	60	155	515	392	907 (39)	230	152	382
NORTH DYKELHAM— Weslevan Sch., Old Village ..	Second Monday in the month ..	17	36	53	82	150	232 (26)	..	..	..
*SKELLETHORPE— Women's Institute ..	Every Monday ..	231	152	383	2196	801	2997 (62)	903	399	1302
SLEAFORD— The Clinic, Eastgate ..	Every Friday ..	145	96	291	1774	942	2716 (54)	264	115	379
STAMFORD— School Chime, Barnhill ..	Second Friday in the month ..	15	24	39	62	109	171 (19)	3	5	8
*THIRLEBY— Chapel Hall ..	First and Third Tuesday in the month ..	74	62	136	467	465	932 (39)	117	95	212
WADDINGTON ..	Second Thursday in the month ..	69	54	120	278	214	522 (43)	115	113	258
Weslevan School, WASHINGTONBOROUGH Village Hall, Hethington ..										

Note.—All the above Centres were open from 2 to 4 p.m. *Taken over in April, 1947. †Taken over in January, 1947.

Table VII.—*PREMATURE INFANTS BORN DURING 1947

		DEGREE OF PREMATURITY						WEIGHT AT BIRTH						Totals
		8 weeks & over						Under 3-lbs.						
		0-2 weeks	2-4 weeks	4-6 weeks	6-8 weeks	8 weeks & over	Under 3-lbs.	3-4 lbs.	4-5 lbs.	5-5½ lbs.	5½ lbs.			
(1) Born at home and nursed entirely at home :—														
(a)	Died during first 24 hours	..	..	..	1	4	1	2	2	..	..	5		
(b)	Died aged 1-7 days	..	..	..	1	1	1	..	..	2	..	3		
(c)	Died aged 8-14 days	..	..	..	..	1	..	1	..	..	..	1		
(d)	Died aged 15-28 days	..	..	..	..	..	..	..	..	..	..	..		
(e)	Survived 4 weeks	19	12	9	5	4	1	5	7	36	49	..		
(2) Born at home and removed to hospital :—														
(a)	Died during first 24 hours	..	1	..	..	..	..	..	1	1	..	1		
(b)	Died aged 1-7 days	..	..	..	..	1	..	..	1	..	..	1		
(c)	Died aged 8-14 days	..	..	..	..	..	..	..	..	..	..	..		
(d)	Died aged 15-28 days	..	..	..	..	..	..	..	..	..	..	..		
(e)	Survived 4 weeks	..	..	..	..	..	..	..	..	..	..	..		
(3) Born in hospital or nursing home :—														
(a)	Died during first 24 hours	..	1	..	..	2	1	2	..	..	3	3		
(b)	Died aged 1-7 days	..	..	1	..	1	..	1	1	..	2	2		
(c)	Died aged 8-14 days	..	1	..	..	..	..	..	..	1	1	1		
(d)	Died aged 15-28 days	..	..	..	..	..	..	..	..	..	..	..		
(e)	Survived 4 weeks	..	5	6	3	..	..	9	8	17	..	17		
TOTALS		..	27	16	16	10	14	4	11	20	48	83		

i.e., babies weighing 5½ lbs. or less at birth, irrespective of the period of gestation.

Table VIII.—DISTRIBUTION OF NOTIFIED CASES OF INFECTIOUS DISEASES IN
RURAL AND URBAN DISTRICTS, 1947
(excluding Non-Civilians)

SANITARY District	Total No. notified	Scarlet Fever	Diphtheria	Measles	Whooping Cough	Acute Pneumonia	(Cerebro- Spinal) Fever	Ophthalmia Neonatorum	Puerperal Pyrexia	Dysentery	Erysipelas	Acute Pollimycellitis	Enteric Fever
Bourne U.D. ..	69 (26)	3	13	10	34	8	—	—	—	—	—	1	—
Grantham M.B. ..	264 (128)	34	1	142	54	16	—	1	11	—	1	4	—
Sleaford U.D. ...	378 (40)	5	—	323	40	5	1	—	1	—	3	—	—
Stamford M.B. ..	171 (72)	13	—	118	22	5	—	—	3	—	12	8	—
Aggregate of Urban Districts ..	882 (266)	55	14	593	150	34	1	1	15	—	6	13	—
East Kesteven R.D. ..	453 (39)	17	4	379	35	6	—	—	1	2	1	8	—
North Kesteven R.D. ..	200 (64)	5	8	163	11	6	—	—	—	—	—	5	2
South Kesteven R.D. ..	264 (103)	5	1	202	37	8	—	1	3	2	2	3	—
West Kesteven R.D. ..	207 (65)	18	—	169	9	6	—	—	1	—	1	3	—
Aggregate of R.D.'s ..	1124 (271)	45	13	913	92	26	—	1	5	4	4	19	2
Totals for whole County ..	2006 (537)	100 (142)	27 (21)	1506 (111)	242 (94)	60 (84)	1 (6)	2 (2)	20 (16)	4 (43)	10 (15)	32 (3)	2 (—)

NOTE.—Figures in brackets relate to 1946.

Table IX. STATISTICS RELATING TO THE WORK OF THE TUBERCULOSIS DISPENSARIES DURING 1947

Diagnosis	PULMONARY				NON-PULMONARY				TOTAL				Grand Total
	Adults		Children		Adults		Children		Adults		Children		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
A.—(1) Number of definite cases of Tuberculosis on the Dispensary Registers at the beginning of the Year ..	153	105	2	6	42	45	21	40	195	150	23	46	414
(2) Transfers from Authorities of areas outside that of the Council during the Year	6	7	—	—	1	3	—	—	7	10	—	—	17
(3) Lost sight of cases returned during the Year	—	1	—	—	—	—	—	—	—	1	—	—	1
B.—Number of New Cases diagnosed as Tuberculous during the Year :—													
(1) Class T.B. minus	14	11	—	—	—	—	—	—	14	11	—	—	25
(2) Class T.B. plus	5	3	—	—	—	—	—	—	5	3	—	—	8
(3) Non-pulmonary	—	—	—	—	4	2	2	3	4	2	2	3	11
C.—Number of cases included in A. and B. written off the Dispensary Registers during the Year as :—													
(1) Recovered	1	6	—	—	3	3	1	2	4	9	1	2	16
(2) Dead (all causes)	10	7	—	—	1	1	—	—	11	8	—	—	19
(3) Removed to other Areas	5	5	—	—	3	—	—	2	8	5	—	—	15
(4) For other reasons	—	1	—	1	—	2	1	1	—	3	1	2	6
D.—Number of definite cases of Tuberculosis on the Dispensary Registers at the end of the Year	162	108	2	5	40	44	21	38	202	152	23	43	420

Table X. —ACTION TAKEN UNDER THE FOOD AND DRUGS ACT,
1938, IN CASES OF UNSATISFACTORY SAMPLES, 1947

No. of Sample	Article	Report of Public Analyst	Action Taken
B.K.138	Milk	10% Deficient in Fat	No action taken
B.K.140	Milk	10% Deficient in fat	No action taken
B.K.141	Milk	3% Deficient in fat	No action taken
S.K.127	Milk	5% Deficient in fat	No action taken
S.K.152	Milk	13% Deficient in fat	No action taken
S.K.156	Milk	16% Extraneous Water	No action taken
No. 25	Milk	10% Deficient in fat	Informal sample followed by formal sample No. 30
No. 30	Milk	10% Deficient in fat	Deficiency caused by uneven interval between milking. Vendor warn'd
B.K.9/47	Milk	16% Deficient in fat	No action taken
B.K.14/47	Milk	4% Deficient in fat	No action taken
B.K.20/47	Milk	16% Deficient in fat	No action taken
B.K.22/47	Milk	3% Deficient in fat	No action taken
S.K.2	Milk	43% Deficient in fat	Vendor prosecuted Fined £5 0s. 0d. Costs £4 4s. 0d.
S.K.3	Milk	3% Deficient in fat	No action taken
S.K.14	Milk	4% Deficient in fat	No action taken
S.K.17	Milk	9% Deficient in fat	No action taken
S.K.24	Milk	11% Deficient in fat	No action taken
G.K.1	Milk	6% Deficient in fat	No action taken
No. 20	Milk	14% Added Water	Vendor prosecuted for three offences—for selling, for having in possession, and for selling again
No.33	Milk	23.3% Added Water 16% Deficient in fat	Fined £6 0s. 0d., with Son fined £3 0s. 0d. for aiding and abetting
No.34	Milk	23.3% Added Water 16% Deficient in fat	Attention of makers drawn to this point
No.8	Ginger Cordial	Incorrectly labelled	

